

United States Senate

WASHINGTON, DC 20510

July 6, 2016

Dr. Margaret Chan
Director-General
World Health Organization
Avenue Appia 20
1211 Geneva 27
Switzerland

Dear Dr. Chan:

As we have seen with the Ebola outbreak and now Zika, infectious diseases know no borders. The alarming spread of yellow fever virus in Africa warrants immediate attention. We applaud the leadership the World Health Organization (WHO) has exhibited in addressing the yellow fever outbreak to date, but ongoing vigilance is needed. There have been over 400 deaths reported in Africa, more than 3,400 suspected cases in Angola, and 1,300 suspected cases in the neighboring Democratic Republic of Congo (DRC).^{1 2} Other countries, including the People's Republic of China, have confirmed yellow fever virus cases in returning travelers from Africa. We commend you for convening a meeting of the Emergency Committee regarding yellow fever virus and ask that you draw on recommendations issued by public health experts to both continue and hasten efforts to address the emerging outbreak.

You recently issued a stern warning at the World Health Assembly, stating yellow fever virus is poised to spread quickly to other regions, including urban areas, with "dense populations of non-immune people, heavy infestations with mosquitoes...and the flimsy infrastructure that makes mosquito control nearly impossible."³ As you know, yellow fever virus causes a devastating disease characterized by high fever, nausea, and pain, and can progress to liver damage and organ failure. Similarly to Zika virus, yellow fever virus can be spread by the *Aedes aegypti* mosquito, which thrives in urban settings. Therefore, the potential for disease spread in populated areas is particularly concerning. There is no specific treatment for yellow fever virus and the disease is fatal in up to 62 percent of severe cases. Fortunately, an affordable, highly effective vaccine does exist—and has existed for nearly 80 years.

¹ WHO. Yellow fever situation report. World Health Organization. June 30, 2016. <http://www.who.int/emergencies/yellow-fever/situation-reports/30-june-2016/en/>

² Ross, A., Congo almost runs out of yellow fever vaccine amid epidemic. *Reuters*. June 22, 2016. <http://www.reuters.com/article/us-congodemocratic-yellowfever-idUSKCN0Z81FI>

³ Chan, M. Address to the Sixty-ninth World Health Assembly. World Health Organization. May 23, 2016. <http://www.who.int/dg/speeches/2016/wha-69/en/>

The recommendation of the Emergency Committee was simple: vaccinate more people in endemic countries and ensure all travelers receive vaccinations to contain the outbreak. Not only are new areas, including Asia, at risk of disease spread, but areas that have long fought yellow fever virus continue to report low vaccination rates. In the DRC, these low rates are, in part, due to the effects of devastating civil wars. The country's fragile public health infrastructure will struggle to withstand yellow fever virus outbreaks. If the disease continues to spread, existing stocks of the vaccine could quickly be exhausted. This challenging reality underscores the importance for the World Health Organization (WHO) to strengthen and hasten its work in combatting yellow fever virus. Following up on the recommendation of public health experts, we ask you to implement the following recommendations:

1. Increase the capacity of high risk areas, such as Angola, to provide routine yellow fever virus vaccinations. Programs such as the Yellow Fever Initiative, led by the WHO and UNICEF have helped to limit yellow fever virus outbreaks in West Africa.⁴ We encourage the WHO to expand these efforts. Additionally, we urge the WHO to begin working with endemic countries and vaccine manufacturers to increase vaccine supply given it can take up to a year for manufacturers to ramp up production.
2. Ensure that vaccine distribution channels are sufficient, and that the supply of vaccine remains adequate, to aggressively conduct the pre-emptive vaccination campaigns outlined in the June 2016 Yellow Fever Strategic Response Framework.⁵ The WHO's emergency stockpile of 6 million yellow fever vaccine doses has been critical to mitigating the spread of the virus. Yet, current emergency quantities have proven insufficient to combat urban outbreaks - the emergency stockpile has been depleted twice this year.⁶ Additionally, we have heard that distribution challenges have limited the availability of existing vaccine supplies in high-risk areas. Therefore, we urge you to consider the potential of the WHO Strategic Advisory Group of Experts (SAGE) on Immunization's recent recommendation to use fractional dosing, which is administering a fifth of a standard vaccine dose, as a short-term measure to combat yellow fever outbreaks during a potential vaccine shortage or when distribution of available vaccine is unable to meet demand.⁷ Lastly, we request you develop understandable alert systems that support a more unified command and control responses at all levels of the WHO.
3. Ensure that membership on WHO infectious disease advisory committees reflect a One Health approach, which integrates animal, human, and environmental health.⁸ Given that the number of outbreaks continues to rise, especially outbreaks of disease that can be transmitted between animals and people, we ask that committees responsible for providing input on prevention and response also include animal and environmental health experts.

⁴ WHO. Yellow Fever Fact Sheet. May 2016. <http://www.who.int/mediacentre/factsheets/fs100/en/>

⁵ WHO. Yellow Fever Strategic Response Plan: June-August 2016. World Health Organization. June 20, 2016. <http://apps.who.int/iris/bitstream/10665/246103/1/WHO-YF-ENB-16.2-eng.pdf?ua=1>

⁶ WHO. Yellow fever global vaccine stockpile in emergencies. World Health Organization. June 16, 2016. <http://www.who.int/features/2016/yellow-fever-vaccine-stockpile/en/>

⁷ WHO. Lower doses of yellow fever vaccine could be used in emergencies. World Health Organization. June 17, 2016. <http://www.who.int/mediacentre/news/statements/2016/yellow-fever-vaccine/en/>

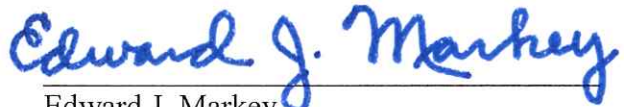
4. Create an Intermediate International Public Health Alert system to improve outbreak response efforts.⁸ Guidance from WHO prior to an outbreak reaching emergency proportions would speed early response and may prevent the threat of an outbreaks from escalating. We encourage the WHO to investigate how such an alert may be implemented.

Thank you for your consideration of our requests. We strongly encourage the WHO to implement these recommendations to improve our ability to respond to disease outbreaks. Please let us know how the United States can continue to support your work to combat this and future outbreaks.

Sincerely,



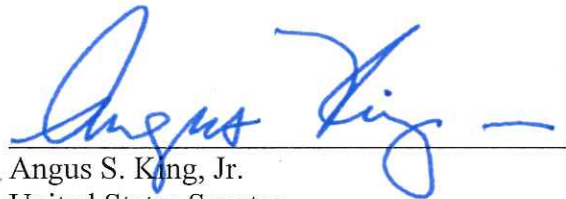
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Amy Klobuchar
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⁸ Director-General. Report of the Review Committee on the Role of the International Health Regulations (2005) in the Ebola Outbreak and Response. *World Health Organization*. May 13, 2016.